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ABSTRACT

Development of the Northwest Environmental Education Center (NEEC) is described in this two-part narration. Part One outlines its 13 year history, starting with the need for setting aside a 600-acre site as an educational reserve on Whidbey Island in the Puget Sound, Washington. Procedures followed and resulting problems associated with fund raising, state and private organization endorsements, eventual state and federal funding, development of proposals, and interdisciplinary planning of site, facilities, and programs are recounted. Part Two enumerates the program, its evolution, and its present status. Philosophical objectives of environmental education are described together with their position in the NEEC program. Major outcomes occuring in the areas of in-service teacher training, pre-service education, learning packages focusing on environmental encounters, identification of regional sites suitable for examination of specific problems and criteria for their selection, study of the impact of man on the natural scene within a geographic area summarized from an historical perspective, and future plans for administrators, teachers, and students are delineated and program activities indicated. (BL)

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THE NORTHWEST ENVIRONMENTAL EDUCATION CENTER: FROM SITE TO SENSIBILITY[1]

by

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The development of the Northwest Environmental Education Center as a Washington State model is really two stories. The first, wholly practical, is the struggle for dollars and state endorsement. The second is the program, what it has evolved into and what it is doing. One story would be incomplete without the other, although the telling of them as one would probably lead to either a dry Chronology of Major Events or hopeless confusion. To avoid both, the narrative is divided into two sections.

I

The Northwest Environmental Education Center (NEEC) has enjoyed a 13-year history that predates the concept of environmental education as we understand it today. The organization was originally a loosely formed association of school districts and state agencies which saw the need for setting aside a 600-acre site on Whidbey Island in the Puget Sound as an educational reserve. Over the years, students from this Northwest region of the state have gone to it with their teachers to examine the bogs, the first and second growth standings of forest, and the one-mile salt water frontage.

In 1967, the school districts arbitrarily increased the student head tax they had been paying annually to the Center from 5¢ to 15¢ so that a Director could be hired to draw up a plan for the site and to raise funds for its development. Mr. William Stocklin, a veteran teacher of the Peninsula School District, was hired to accomplish these tasks and to bring about, in whatever way seemed feasible, state recognition and support. The Board of Advisors estimated at that time that a fund-raising goal of $500,000 would be required, the first $24,000 of which reflected the school district contribution over a five-year period, 1963-1968. An additional $4,000 had already been authorized the previous year by the Board for the drilling of a well on the site. Western Washington State College, located in Bellingham, Washington, held the lease to the site from the Department of Natural Resources, and offered, as part of its financial contribution, office facilities on campus.

Fund raising began in earnest in the Fall of 1968, with letters to 25 major foundations and many more to local foundations and industries. All agencies replied in the negative, if they replied at all, and for a good reason: The Northwest

Environmental Education Center was only a name and, from a foundation's point of view, a bad financial risk. It became clear that unless one organization was willing to take a gamble on NEEC's future that the fund-raising drive would be an exercise in futility. In the Fall of 1969, one year after the drive began, the Weyerhaeuser Company Foundation decided to take such a gamble and promised $10,000 to NEEC, if it could raise an additional $10,000 from other private sources. With that letter in hand, Mr. Stocklin began a road tour throughout Western Washington asking for the required money to match this pledge. (Mr. Stocklin continues to average 3,000 business miles per month, a necessary requisite when a program is building from the ground up.) By January 1970, the additional $10,000 had been raised through the generous efforts of Pacific Northwest Bell ($1,000), the Seattle Foundation ($2,000), the Puget Sound Power & Light Company ($4,000), and the Washington Forest Protection Association ($3,200). Xeroxed copies of these checks were mailed to Weyerhaeuser, and it, in turn, mailed its contribution to the Center.

By this date the Washington State Legislature had convened in special session. In anticipation of it, NEEC wrote and submitted a bill calling for state recognition and support. Prime sponsors of the bill represented both major political parties in the House as well as in the Senate. (Although this bipartisan sponsorship may not always be possible in other states, it is a desirable goal to work for. If environmental education, as an issue, can remain divorced from political in-fighting, it stands a better chance of passing intact.) The bill was accepted by both education committees, although members of each raised questions in hearings for which NEEC was unprepared. Emphasis was still on development of the Whidbey Island site and legislators asked, with some justification, why NEEC was not considering the use of facilities at state parks. There was still confusion, even after the hearings, over what was meant by environmental education. Visions of more leaf collections and songs around a campfire danced in the heads of some legislators, one of whom publicly declaimed the program as "boondoggle".

A total of $50,000 was finally appropriated to NEEC toward the end of the session out of the emergency fund of the State Office of Public Instruction, which identified NEEC at that time as a state model. According to legislators, funding to NEEC out of emergency funds was based on its long history of grass roots support from the school districts, its ability to raise $20,000 in private money and to

attract the written endorsements of eight key state-wide organizations. These organizations are listed here so that the divergent points of view they represent can be appreciated.*

Society of American Foresters
Washington Education Association
Natural Resources Forum of Washington
Puget Sound Governmental Conference
The Izaac Walton League of America
Washington State Student Body Presidents
Washington Environmental Council
Washington State School Directors' Association

Five months had been given over by NEEC in its appeal for state support. It was time now to test its strength with federal funding agencies. A proposal which it had drafted in October 1969 calling for a national conference of environmental education had been returned by the U.S. Office of Education and the Department of the Interior for lack of funding. Correspondence between these offices was again resumed and instructions followed from the U.S.O.E. to NEEC to design a plan for a regional (inter-state) conference for which money might be available later in the year. Two more drafts were again prepared, one in May and one in July, the second of which had the advantage of being reviewed locally by Region X officials of the U.S.O.E., who had become established by then in Seattle. In the end, both the national conference and the regional conference were awarded to other institutions. Fortunately it was only a minor disappointment, so qualified because of the experiences gained by NEEC in preparing for a state meeting it held in early May 1970 on the campus of Western Washington State College. This meeting convinced its small staff (one full-time director, one half-time assistant director, and one half-time secretary) that man hours were spent more productively in developing programs than in planning meetings. On May 8, NEEC held the first Washington State Conference on Environmental Education which, some may recall, was the same day on which protest marches took place across the nation against

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*The importance of this diversity to curriculum development can not be minimized. The Washington Environmental Council and the Society of American Foresters will probably not be in complete agreement on how virgin forest should be managed, but both represent strong positions, at least within this region, which should, therefore, be reflected in any curriculum which is formed.

the U.S. invasion of Cambodia. Most of our intended audience were standing in the rain at the Federal Building in Bellingham, and the few of us who were in the auditorium to hear Ian McHarg wished we were there instead. So too, Ian McHarg.

In late May, Mr. Stocklin traveled to Washington, D.C. on money borrowed from a colleague in the Geography Department at Western and met with officials who looked over four new proposals: one was the regional conference, one called for the establishment of an inter-institutional vehicle for program development; one for creation of a school district model; and one for the development of the Whidbey Island site. In June, the proposal describing the school district model was returned by the U.S.O.E. for "fleshing out". Working under the fiscal year deadline, NEEC resubmitted the proposal. Calls for a story from local newspapers in early July was the first indication that a decision had been made. A total of $67,000 was awarded to NEEC by the National Center for Research and Development (U.S.O.E.) which informed NEEC that it was one of only two such grants to be funded nationally. Selection of a project director by Mr. Stocklin, Mr. Robert Warnecke, Superintendent of the Sedro Woolley School District (the model district), and Dr. Gene Miller, Dean of Huxley College of Environmental Studies (located on the campus of Western Washington State College) took place in late August, with the teacher training under way by October.

During that same time period, the four community colleges within the region endorsed the project, and a new Board member was added to represent them, thus bridging the final gap between the public schools and the higher institutions. Additional funding from the Washington Forest Protection Association continued, with Weyerhaeuser contributing an additional $1,800, Simpson Timber Company $1,000, and the Georgia-Pacific Corporation $5,000. More recently, the Intalco Aluminum Corporation of Ferndale has contributed $4,000 for the development of an in-district site model.

Fulfillment of the work for the State Office of Public Instruction and preparation for the 1971 legislative session preoccupied NEEC during the latter months of 1970. In the belief that the "experts" in environmental education existed somewhere outside of the NEEC office, the Advisory Board, now a Board of Directors, and Mr. Stocklin committed most of the $50,000 of state money to the hiring of a consultant/architect whose tasks were to develop a regional (inter-county) plan

of environmental education and to prepare documents for the use of the Whidbey Island site. Unfortunately greater emphasis was given to buildings for the site, to their probable location and capacity, without sufficient attention given to use. In short, NEEC found itself doing things backwards, building a program to suit a facility. After one abortive attempt to piece together a rationale for the proposed physical plant, NEEC called together a team of teachers from the common schools, the community colleges, and Western Washington State College to complete the job. Representatives from state agencies, such as the State Office of Public Instruction and the State Departments of Natural Resources and Parks & Recreation, others from major industries and from conservation groups were also included so that the final program would be the product of those people who had a stake and commitment in it. Between the middle of September and the middle of October 1970, a new document was published by NEEC, entitled "Survival Through Education", which began to satisfy the academic needs of the region as NEEC saw them. One important lesson was to be learned from this experience. Although the consultant was of considerable value to NEEC, of equal value were those human resources to be found within the region. They are already dedicated to the idea, are actively involved with it in the classroom, and are willing to help without any kind of remuneration. For any school district, college, or consortium of educational institutions with limited funds, NEEC recommends the same approach. Money is better spent in these early years in course development and in assisting teachers to return for retraining.

Funding to environmental education for a second year by the present Washington State Legislature will not be known until early April. The state is suffering from an economic recession which can, from NEEC's point of view, be turned to advantage. With the total number of educational dollars threatened, it is perhaps time to reassess what is important in education. New priorities should be considered and dollars reallocated from programs which have not worked or are of less importance today to those which have a hope for preparing students to deal effectively as adults with environmental problems.

A new relationship has been established between NEEC and Huxley College of Environmental Studies that is unique, at least within this state. Mr. Stocklin will become a part of Huxley's faculty in September 1971, with the Board remaining intact as an advisory body to it. The close ties between the common schools, the

community colleges, and the higher institution which are so important to coordinating teacher training efforts with district programs will thus be strengthened.

One question should be answered before a consideration is made of program development. How was the money spent? Of the $157,400 awarded to NEEC from September 1969 to the present, $24,800 have been allocated to meet the operating expenses of the Center which are budgeted through August 31, 1971. The balance of the funds has gone for scholarships to teachers; for the hiring of a consultant to assist with the development of the state model; for installation of interim facilities at the Whidbey Island site (a water system, underground wiring); and for the development of a district-wide model program.

Although such a story can weary with the telling, it should be told at least once in print, so that other organizations can profit equally by our successes as well as by our failures.

II

Program development was a natural outgrowth of the experiences of the Director as a teacher in the Peninsula School District. For seven summers prior to his appointment as Director, Mr. Stocklin organized and conducted field experiences throughout the states of Washington and Oregon for his students. He modified a traditional school bus so that it could carry sleeping gear, kitchen utensils and food, as well as a library and equipment for soil and water testing, and for slide and film presentations. The three-week summer experience began to attract attention across the state, and eventually was documented on film by the State Office of Public Instruction as a significant new approach to learning about the environment.*

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*Fourteen school districts in the state of Washington will begin a 12-month academic year on a pilot basis this Fall, increasing the opportunities for these summer field experiences to occur as part of the regular program.

Philosophical Objectives:

The evolution of a philosophical position on environmental education, which is the first step to program development, was influenced initially by NEEC's conviction that the environmental problems we face as a nation are the product of an educational system that works against our ability to see the world holistically. The arbitrary separation of one discipline from another for administrative convenience is furthermore increasing the likelihood that the fragmented and incomplete world view we now hold will continue as long as an attempt to make "connections" goes untried.

Consequently, NEEC concerned itself during the early months with defining the differences between environmental education and outdoor education, and with distinguishing, for its own self-education, between the symptoms and causes of environmental problems, a confusion most apparent nationally during Early Day 1970. Discussion among the staff about the role that values play in generating and perpetuating these problems led to the compilation by NEEC of a brief and, in retrospect, unsophisticated listing of these causes. Lynn White's "Historical Roots of Our Ecological Crisis"[1] provided additional clues to how the Western tradition has contributed to the present dilemma. Of greatest significance to the refinement of NEEC's position, however, was a working paper prepared for the Bureau of Research, U.S.O.E., by the Stanford Research Institute entitled "Alternative Futures and Educational Policy"[2] in which it concludes that the world macroproblem (problems of the ecosystem; the expanding have-have not gap domestically and between nations, and technological threats) is symptomatic of a pathogenic condition most obvious in highly industrialized nations. In short, the problems we must solve, which are largely a consequence of unchecked technological and population growth, are a function of values and premises that we continue to operate within.

Identification of those values that are pathogenic is complex, for some have the potential to resolve problems as they create others. Medical advances within the past two decades which have increased the human life span here and in underdeveloped parts of the world have unintentionally provoked in impoverished nations an increase in the number of deaths from famine. However humane the original motives were (the prolonging of life), no provision had been made to help these populations check their rates of birth, a provision that would have allowed them some exercise of control over the quality of their lives. (These same humanistic value systems were at variance during legislative debates over

abortion reform.) An ever-increasing GNP has the potential to stimulate jobs for an ever-increasing population. At the same time, however, irreplaceable resources will be tapped at an ever-increasing rate which will, when they are depleted, have dramatic and deleterious effects on the way we live. The belief that technological breakthroughs will occur to solve this depletion is itself a pathogenic premise. Both the Stanford Research Institute and the U.S. Office of Education agree that technology, far from being a panacea, is itself, through excessive misuse, the major cause of most of the serious environmental problems we face today.

It is important, however, to define the context in which environmental education occurs. The SRI asserts, and NEEC concurs, that only through the protection of human rights can a redirection of values or premises be justified. The context must be moral, and reinforce the freedom of choice that each individual has the potential to exercise. The rights we are referring to have not, in practice, been honored by our culture. Decisions to develop and use technology to support an ever-expanding GNP have not been made within a moral context. The rights of individuals to a healthy environment have been denied and the political process by which they could redress this grievance continues to favor those with the greatest resources at hand. This deviation from our moral responsibilities is what our disenfranchised youth have been trying to point out to us in a variety of ways.

The Program:

Experience gained in the Sedro Woolley Project, under the direction of John Miles, is leading to the establishment of guidelines for the in-service training of public school teachers as well as to formation of a pre-service program within Huxley College of Environmental Studies. Early attention was given to perception training so that the teachers could begin to see and relate to the world in a new way. The Spaceship Earth metaphor,which is taking form through investigations by the Center for Curriculum Design (Kendall College, Evanston, Illinois),is perhaps the most concise phrase for describing what we have been attempting with an admittedly small teacher population. The possibility of arriving at this ecological world view has been subject to measurement, the results of which will

be available in June at the end of the first year's training. A control population has likewise been tested, and it is hoped that significant differences in values and behavior will be apparent.

Another major outcome of the Sedro Woolley project is the development of learning packages focusing on environmental encounters. Teachers from this model district are presently taking a physical inventory of their community, initially of those areas surrounding the school building proper, so that it can be used as a primary resource for learning. Examination of a microsystem, a one-block radius of homes surrounding a particular school, can easily lead to the identification of certain ecological principles (e.g., every system has a load limit or carrying capacity) that have universal applications. A hypothetical example is drawn here, although it is anticipated that case histories of authentic encounters will be forthcoming shortly from the Sedro Woolley teachers. A fifth grade teacher takes his class for a walk around the immediate neighborhood. One child notes that individual homes are beginning to be replaced by apartment houses, or perhaps that some of the homes look abandoned. Whatever they find, the opportunity of the teacher to ask questions about the visible changes is optimal. (We assume that these same students will have had a similar experience as fourth graders.) Why would the population size change within a particular area? Is it more attractive than last year? Is it less attractive? Are there just more people now in Sedro Woolley than there were five years ago? If the area appears cluttered, unattractive, is it a function of over-crowding or of the migration to it of people with less money to spend on keeping up a yard? Is income indicative of behavioral patterns? Can we generalize about rich people? Poor people? If neighborhoods "go down" as incomes go down, does it have anything to do with education? Do people who live here perceive the changes occurring around them? Can we ask? Do they see what we see? If not, why not?

This exercise should go on at length and explore the history of the neighborhood and then perhaps the history and growth of the town. What is important here is that a child's level of perception is increased and given direction, and answers are given to questions about the immediate world that holds, at that age, great interest for him. This "encounter" has the potential to introduce information from many disciplines such as math (population growth and decline), history (the changing scene), human geography (the movement of people to service areas such as schools),

psychology (Do people perceive what we perceive?), economics (Is change a function of income?), and even politics (How is this area zoned and by what governmental body?).

In practice, the whole Northwest region of Washington state should be accessible to the public schools within it and function as the primary resource for all learning. NEEC proposes a plan that will make the region more understandable to its teachers and students and that will identify those "sites" within the region particularly suitable for examination of specific problems.

To provide a geologic and historic series of time continuum experiences, a study was undertaken which includes a description of the natural landscape (its physiography, glaciology, and biogeography) as well as some general conclusions drawn about the impact of man on the natural scene. The use that has been made by man of the natural resources to be found within this geographic area is summarized from an historical perspective. A visual inventory of 25 cities and towns within the region is also nearing completion, and includes slides of how these human communities appeared in years past, and how they look today.

Criteria for selection of sites which NEEC believes to be important at this initial stage have been established:

Each site will be developed around a problem-solving theme, such as air, water, or noise pollution.

Each site and its "theme" will demonstrate the transdisciplinary approach that must be applied to the study of environmental problems.

Each problem-oriented site must demonstrate the potential for more than one solution to that problem.

The relationship of one site (one problem) to the other sites (other problems) must be explicit so that the complex relatedness of one isolated problem to another can be appreciated.

A series of sites will also be selected which illustrate the progression of a particular environmental problem such as poorly planned suburbs. Examination can be made of land-use patterns around the margins of a city before a suburb has taken root; of an actively developing suburb; and of a suburb that is experiencing high human impact. Sites will be selected for which there is sufficient data so that change is more readily perceivable. Old photographs, maps, original plattings, vital statistics, early records of water sources are only a few examples of the kind of information that will enrich the learning potential of a particular area. Environmental surveys of the highway routes to be used to get to and from a site will be included as part of the site selection phase so that time spent in tramsit will be given purpose. In short, these sites will provide a systems view or holistic approach to understanding man and the environment. Teachers from the region will receive training by the Center on how to use these sites effectively. Although the data that NEEC accumulates on the Northwest region will have little value to other regions, except for comparative studies, the process is not in any way confined to regional use.

SUMMARY

It would be impossible to give credit to all of the individuals who have contributed their time and ideas to the Center. Individually, they represent most, if not all, of the traditional disciplines to be found in most schools as well as special interests within the region. Three lengthy "brainstorming" sessions have been called since July 1970, at which times the program was re-examined and enlarged, based primarily on what we are learning in the field.

Future plans of NEEC include a series of workshops for administration, teachers, and students in each of the 38 districts it represents. Initial meetings this Spring will be directed toward the education of the school administrators to the program so that teachers will be assured of total support as they attempt to develop new programs. An Environmental Education Institute will be held this summer by Huxley College of Environmental Studies in cooperation with NEEC to provide teachers and administrators at all levels with a background in environmental studies. Pre-service training in environmental education will begin in

the Fall of 1971 with a relatively small student population so that new approaches and courses can be closely monitored.

NEEC believes that the task of education must be to widen the opportunities for thoughtful and decisive action. If the achievement of a world view or holistic view of man and the environment is within the realm of possibility, and NEEC believes it is, then it must be tried. A certain amount of risk is implicit in any program that speaks directly to those operative values which work against the possibility of survival, but the alternative, to do something less, is untenable.

REFERENCES

1. White, Jr., Lynn. "The Historical Roots of Our Ecological Crisis," Science 155: 1203-1207, March 10, 1967.

2. Harman, Willis W. "Alternative Futures and Educational Policy," Memorandum Report EPRC 6747-6. Prepared for the Bureau of Research, U.S. Office of Education, by the Educational Policy Research Center, Stanford Research Institute, Menlo Park, Calif., February 1970.